

METHOD FOR FABRICATING FORWARD AND REVERSE BLOCKING DEVICES

ABSTRACT OF THE DISCLOSURE

A power device includes a gate electrode, a source electrode, and a drain
5 electrode provided within an active region of a semiconductor substrate of first conductivity
type. A vertical diffusion region of second conductivity is provided at a periphery the active
region. The vertical diffusion region extends continuously from a top surface of the substrate
to a bottom surface of the substrate. The vertical diffusion region includes an upper portion
having a first depth and a lower portion having a second depth that is substantially greater
10 than the first depth.

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